

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Laura Wills Mirkarimi

Serial No.:

Examiner:

Filing Date: Herewith

Group Art Unit:

Title: METHOD FOR ETCHING HIGH ASPECT RATIO FEATURES IN III-V BASED COMPOUNDS  
FOR OPTOELECTRONIC DEVICES

COMMISSIONER FOR PATENTS  
PO Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:  
☐ Statement under 37 CFR 1.97(e), or  
☐ a \$180.00 Processing fee under 37 CFR 1.17(p), or  
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:  
☐ Statement under 37 CFR 1.97(e), and  
☐ a \$180.00 processing fee under 37 CFR 1.17(p).  
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Please charge to Deposit Account 50-1078 the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account 50-1078 pursuant to 37 CFR 1.25.

☐ Applicant(s) submit herewith Form PTO 1449. References identified with an asterisk (\*) were disclosed in Patent Application No. \_\_\_\_\_ filed \_\_\_\_\_, now U. S. Patent No. \_\_\_\_\_, and, as such, copies thereof are not included pursuant to the provisions of 37 CFR 1.98(d).

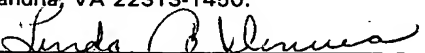
☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

"Express Mail" label no. EV 262 717 763 US

Date of Deposit **January 26, 2004**

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

By



Typed Name: Linda A. limura

Respectfully submitted,

  
Laura Wills Mirkarimi

By

  
Juergen Krause-Polstorff

Attorney/Agent for Applicant(s)  
Reg. No. 41,127

Date: January 26, 2004

<b>FORM PTO-1449</b>  <b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	ATTY. DOCKET NO.	SERIAL NO.
	10030753-1	
	APPLICANT <b>Laura Wills Mirkarimi</b>	
	FILING DATE	GROUP
	Herewith	

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	*	DOCUMENT NUMBER	DATE	NAME
		5,624,529	04/29/97	Randy J. Shul et al.
		5,338,394	08/16/94	Mohammed A. Fathimulla et al.

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	NAME	TRANSLATION	
					YES	NO

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	Chen, Hsin-Yi et al., "Inductively Coupled Plasma Etching of InP using CH <sub>4</sub> /H <sub>2</sub> and CH <sub>4</sub> /H <sub>2</sub> /N <sub>2</sub> ", Journal of Vacuum Science Technology, B 20(1), Jan/Feb 2002, pp. 47-52.
	Hur, Katerina Y., et al., "Reactive Ion Etching of InP Via Holes", Journal of Vacuum Science Technology, B 12(3), May/Jun 1994, pp. 1410-1412.
	Feupier, Y. et al., "Influence of the Gas Mixture on the Reactive Ion Etching of InP in CH <sub>4</sub> -H <sub>2</sub> Plasmas, Journal of Vacuum Science Technology, B 15(5), Sep/Oct 1997, pp. 1733-1740.

EXAMINER	DATE CONSIDERED
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\* Copies of these references are not enclosed pursuant to 37 CFR 1.98(d). (See accompanying IDS)

FORM PTO-1449

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EXAMINER INITIAL	*	DOCUMENT NUMBER	DATE	NAME

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	NAME	TRANSLATION	
					YES	NO

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

		Grover, Rohit, "Process Development of Methane-Hydrogen-Argon-Based Deep Dry Etching of InP High Aspect-Ratio Structures with Vertical Facet-Quality Sidewalls", Journal of Vacuum Science Technology, B 19(5), Sept/Oct 2001, pp. 1694-1698.

EXAMINER

DATE CONSIDERED

\* Copies of these references are not enclosed pursuant to 37 CFR 1.98(d). (See accompanying IDS)